

45.(amended) A compound identifiable as an inhibitor or an enhancer of NAALAD-ase activity according to the method of claim 43.

Remarks

Applicants have amended the claims to eliminate multiple dependencies and to clarify the claim language. No new matter has been added.

Respectfully submitted,

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Docket No. J0205/7000
Dated: January 12, 2001
X01/14/01

AMENDED CLAIMS

9.(amended) A nucleic acid molecule capable of hybridizing to the cDNA molecules according to [any of] claim[s] 1 [and 8] under high stringency conditions.

14.(amended) A protein according to claim 12 [or 13] having the amino acid sequence illustrated in Figure 4.

17.(amended) A protein according to claim 15 [or 16] having the amino acid sequence illustrated in Figure 5.

18.(amended) A DNA expression vector which comprises a cDNA molecule according to [any of] claim[s] 1 [to 8].

20.(amended) A vector according to claim 18 [or 19] which comprises a sequence encoding a reporter molecule.

21.(amended) A host cell transformed or transfected with the vector according to [any of] claim[s] 18 [to 20].

23.(amended) A host cell according to claim 21 [or 22] which is a COS cell.

24.(amended) A transgenic cell, tissue or organism comprising a transgene capable of expressing a protein according to [any of] claim[s] 10 [to 17].

25.(amended) A transgenic cell, tissue or organism [according to claim 24] comprising a transgene capable of expressing a human NAALAD-ase L protein having an amino acid sequence encoded by the nucleotide sequence illustrated in Figure 1 or a functional equivalent or derivative thereof wherein said transgene comprises a vector according to [any of] claim[s] 18 [to 20].

26.(amended) A cDNA or nucleic acid molecule according to [any of] claim[s] 1 [to 9], or a functional equivalent thereof, for use as a medicament.

27.(amended) Use of a cDNA or nucleic acid molecule according to [any of] claim[s] 1 [to 9], or a functional fragment thereof, in the preparation of a medicament in the treatment of neural diseases including Alzheimer's disease, schizophrenia, ALS, Parkinson's disease, peripheral neuropathy, Huntingdon's disease, acute brain injury, multiple sclerosis, exposure to neurotoxins, peripheral nerve trauma, ischaemia or dementia.

28.(amended) A pharmaceutical composition comprising a nucleic acid or cDNA molecule according to [any of] claims 1 [to 8 or a protein according to any of claims 10 to 17] together with a pharmaceutically acceptable carrier, diluent or excipient therefor.

29.(amended) A method of determining whether a compound is an inhibitor or an enhancer of activity of a NAALAD-ase protein according to [any of] claim[s] 10 [to 17] which method comprises contacting said compound with NAALAD-ase protein in the presence of [³ H] N-acetyl-L-aspartyl-L-glutamate (NAAG), and monitoring for the extent of hydrolysis NAAG compared to a control of said NAALAD-ase and NAAG which is not contacted with said compound.

30.(amended) A compound identifiable as an [in] inhibitor or enhancer of NAALAD-ase activity according to claim 29.

34.(amended) A method of identifying a compound which is an inhibitor or an enhancer of expression or activity of a NAALAD-ase protein according to [any of] claim[s] 10 [to 17] which method comprises contacting a host cell, tissue or organism expressing said protein with a compound to be tested and monitoring the expression or activity of said protein compared to a control which comprises said cell expressing said protein but which has not been contacted with said compound.

35.(amended) A method according to claim 34 wherein said NAALAD-ase expressing cell comprises a host cell [according to any of claims 21 to 23 or a transgenic cell, tissue or organism according to claims 24 or 25] transformed or transfected with a DNA expression vector which comprises a cDNA molecule encoding a human NAALAD-ase L protein having the amino acid sequence illustrated in figure 1 or a functional equivalent, derivative or bioprecursor thereof.

37.(amended) A compound identifiable as an inhibitor or an enhancer of expression or activity according to the methods of [any of] claim[s] 34 [to 36].

43.(amended) A method according to claim 41 [or 42] wherein said substrate comprises [³H] NAAG and said enzyme comprises a NAALAD-ase enzyme.

44.(amended) A method according to [any of] claim[s] 41 [to 43] wherein said enzyme comprises a human NAALAD-ase L protein having an amino acid sequence encoded by the nucleotide sequence illustrated in Figure 1 or a functional equivalent or derivative thereof [according to any of claims 10 to 17].

45.(amended) A compound identifiable as an inhibitor or an enhancer of NAALAD-ase activity according to the method of claim[s] 43 [or 44].